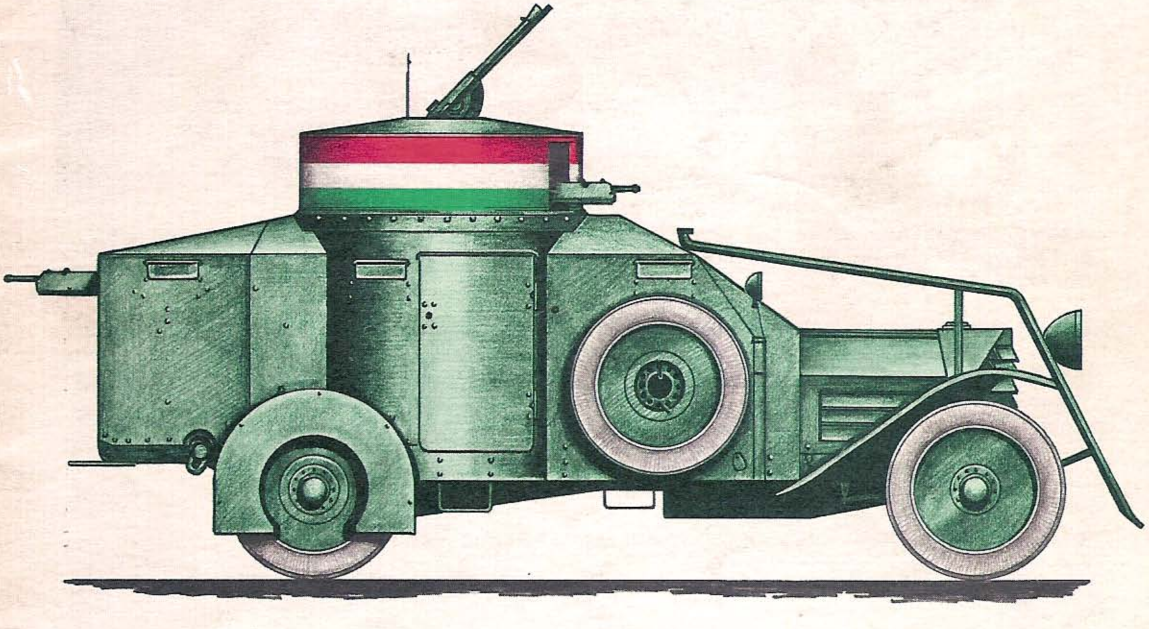
BELLONA

SERIES
36

MILITARY VEHICLE PRINTS



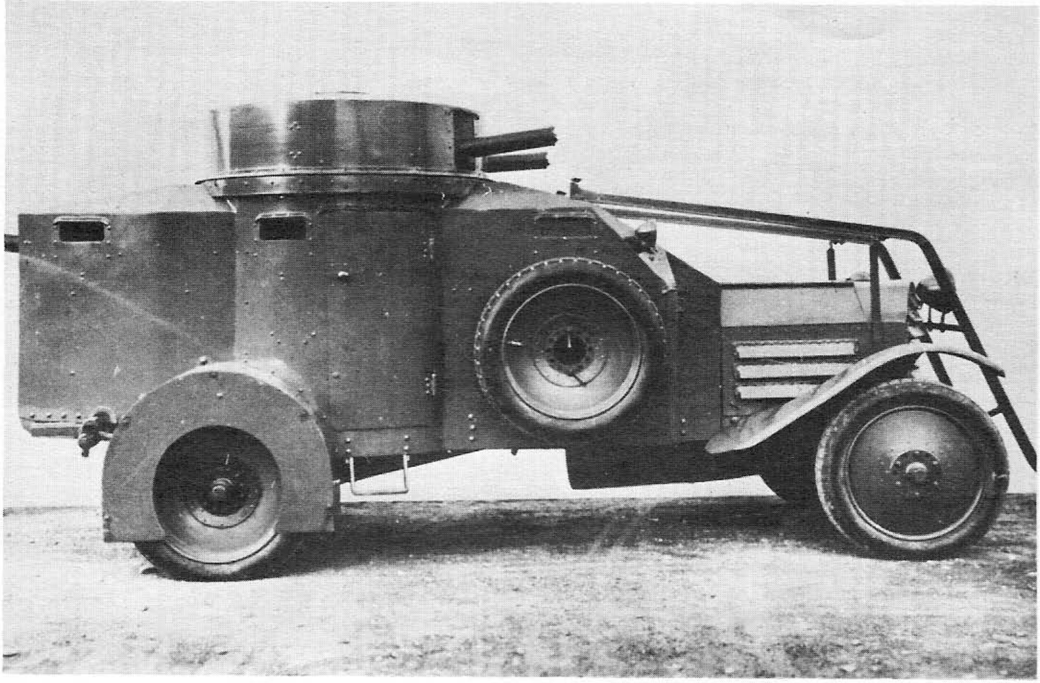
SERIES THIRTY SIX

AUTOBLINDOMITRAGLIATRICE ANSALDO (LANCIA 1 ZM, 1917)	(IT)
SEMOVENTE DA 105/25 SU SCAFO M 43 – 1943/44	(IT)
STURMGESCHUETZ M 43 MIT 75/34 (851)(i) – 1944/45	(IT/GE)
STURMGESCHUETZ M 43 MIT 75/46 (852)(i) – 1944/45	(IT/GE)

by Dott. Nicola Pignato.

DETAILED PLAN VIEWS PRESENTED IN 1:76 & 1:48 SCALE

30p



ABOVE: *The right hand side of the Lancia 1 ZM armoured car. Of special interest is the wire cutting rails over the front of the vehicle, the independent twin machine guns in the turret and the single turret in the rear of the car.*

COVER ILLUSTRATION – Drawn by George Bradford
The Lancia armoured cars carried an unusally colourful finish. The turret being finished in the three national colour of Italy, red, white and green. The remainder of the car being finished in a more normal dull green.

BELLONA MILITARY VEHICLE PRINTS – Series Editor: Hilary Louis Doyle.

AUTOBLINDOMITRAGLIATRICE ANSALDO (LANCIA 1ZM, 1917)

Drawings and historical research by Dott. Nicola Pignato.

The second standard Italian First World War Armoured Car, the Lancia 1ZM, was basically no more than the 1Z model of 1915 with a body which had fewer vision ports and one turret instead of the coaxial two. In fact, the upper turret was disposed of because it upset the gravity of the vehicle too much. The air louvres in the front of the radiator armour were also slightly modified and improved; two spare wheels were carried on the right side hill, instead of the single wheel suspended under the rear of the body in the earlier models.

A third machine gun was places at the rear of the hill, with limited traverse of 30 degrees, but with better depression for grazing fire.

The new cars had their armour made of molybdenum steel instead of the original nickel-chromium steel plates, because of the wartime shortage of chromium and nickel. So, the resultant armoured car was a little more vulnerable, but was more heavily armed and had the more effective 8mm St. Etienne machine guns in the place of the 6.5 mm Maxims.

The good performances of the Lancia 1Z Abm.'s available during the retreat to the Pivave river, led to an order for about 110 cars of this improved model. All were produced by Ansaldo of Genoa. The vehicles were all delivered before the end of the war. Their original price is unknown; however, in July 1927, these cars, with accessories and spare parts included, were valued at 75,000 Lira each. Weapons were not considered in this computation, so obviously the total value was much greater. No difference was made between early and later models in this valuation.

The cars were built on the well proved Lancia 35 HP chassis. The weight of the chassis was of 1,600 kg. while the weight of a complete Abm. was 3,800 kg. with weapons, ammunitions, accessories but without a crew.

This chassis was powered by the 4 cylinder 35 H.P. Model 1915 Pehal engine with ignition by high voltage magneto, & Zenith H.A. carburettor made of three elements; lubrication by gear pump, with a 5½ litre oil tank; cooling by water, with centrifugal pump and ribber radiator. The transmission included a dry clutch with 18 steel discs and 9 ferodo-steel discs, a gearbox of the double train-balladeur type with 4 forward and 1 reverse speed a transmission shaft protected by a steel plate stamped rib with a 4 pinion differential gear.

Steering was by worm screw, with a sector dèvice for the inclination of the steering wheel at 34, 37 or 40 degrees. The chassis was a four wheel (twin at the rear) with steering on the front and drive to the rear wheels only. Suspension with semi-elliptic leaf springs was provided at the front and at the rear. Wheels were disc type with pneumatic tyres. The road speed of these Lancias was 60/70 Km. p.h.

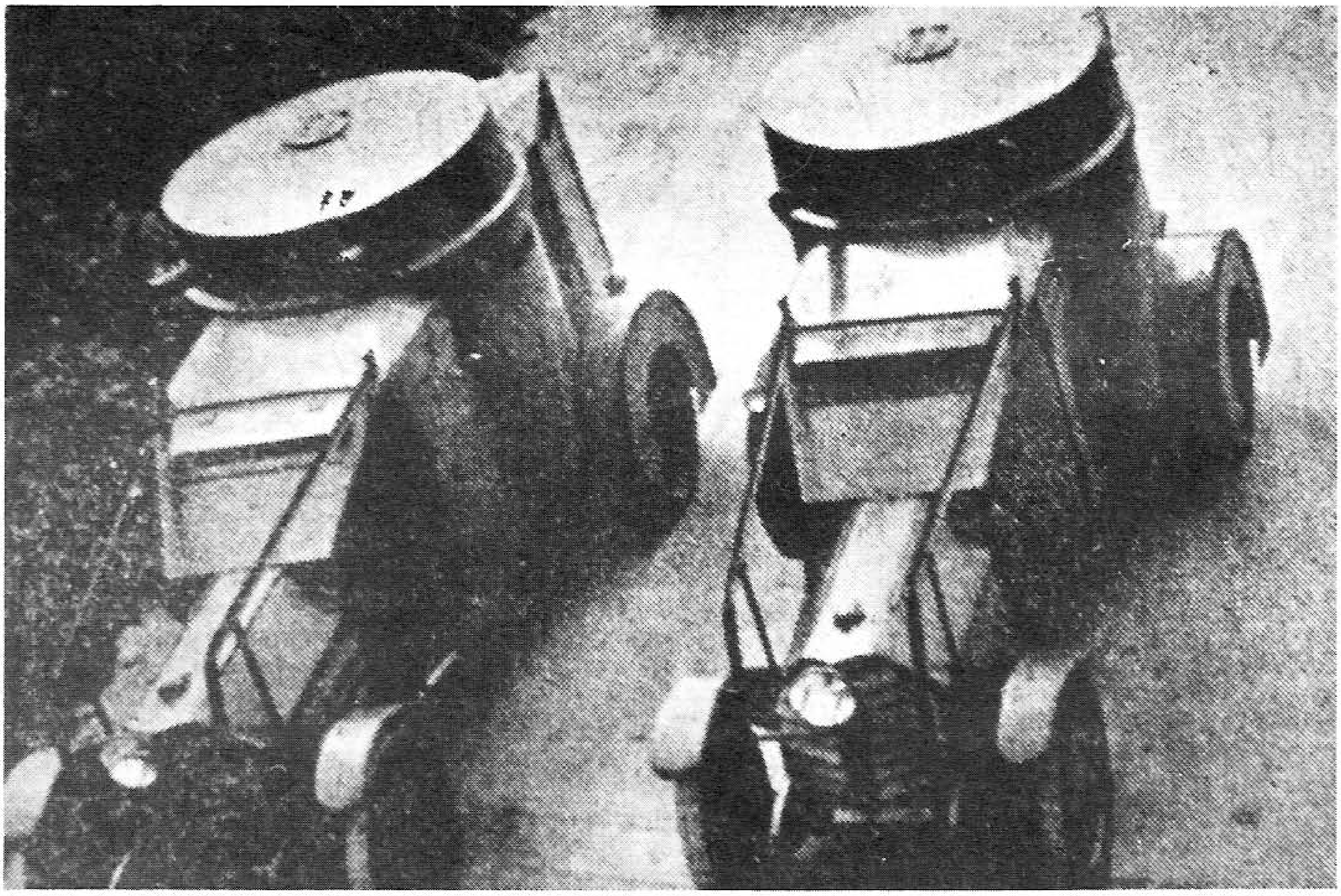
Consistent with their working, all the chassis and the engine parts were protected by 6mm tempered steel plating. This armour plate was bullet proof at a 100 metres range when tests were carried out with the Model 91 standard rifle bullet.

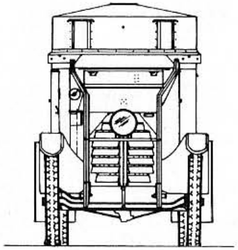
In particular, the engine was protected by the armour bonnet, louvred to allow the passage of the air through the radiator, by a front plate suitably bent to convoy air to the radiator and by two side plates inserted on the skirt. This louvred armoured bonnet alone weighed 170 kg. and was fixed to the chassis girders at the front, and to the angle sections of the hull body to the rear. Photographic evidence shows that there were higher bonnets on some vehicles.

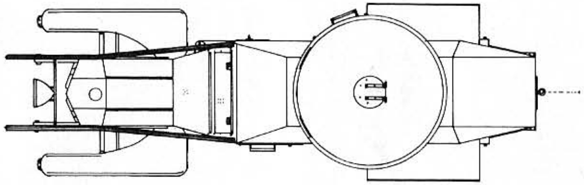
This was the armoured body of the car; it had two access doors (one on each side), seven adjustable observation ports (three each side and one at rear) and a flap for the driver in the front glacis plate.

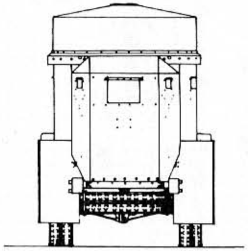
They provided a wide vision ability from the inside of the car. The fuel tank was protected below by 5mm plates; the floor by 2.5 mm plates as well. On the fuel tank there was a wooden seat; laterally, there were

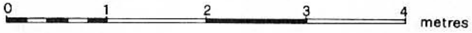
BELOW: *This overhead view taken during a parade clarifies the unusual shape of the early Lancia armoured cars.*



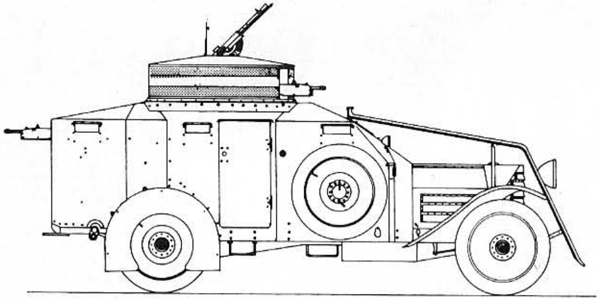




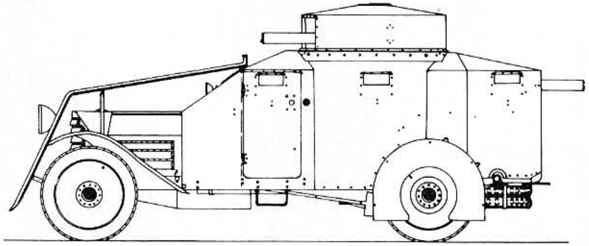




Abm. ANSALDO



1918



1928

Technical Specification for Autoblindamitragliatrice Ansaldo (Lancia 1ZM 1917)

Crew:	6 Commander, Driver Mechanic/Driver Three gunners
Weight:	Combat loaded: 9,240 lbs. 4.13 long tons, 4.62 short tons. 4.2 tonnes.

Performance

Speed Max Road:	37 m.p.h. (60 Km.p.h.)
Max. Gradient:	8 degrees. (16%)
Fording depth:	1' 11½" (60 cm)
Min. Turning circle	23' 0" (7 metres)
Range (Internal fuel Road:	270 Miles (333 Km)
Power to weight ratio:	8.4 Metric HP/ton

Dimension

Length overall:	18' 9"(570 cm)
Width overall:	6'4½" (194 cm)
Height:	7'10½" (240 cm)
Ground clearance:	6" (15 cm)
Turret ring dia:	4' 7" (140 cm)

Wheels

Centres front	4' 8" (142.5 cm)
Wheelbase	11'0" (335 cm)
Tyres:	Pirelli 935 x 135 cord (bead)
Wheels:	Sheet metal disc

Mechanical Details

Engine:	1 x Lancia 35 hp. 4940 cc 4 cylinder water cooled petrol ehgine developing 70 bhh at 2,200 rpm.
Transmission:	Dry clutch, 4 forward, 1 reverse gear.
Steering:	Worm
Suspension:	Semi-elliptic leaf springs
Breaks:	Hand or rear wheels only, foot on transmission shaft.

Armament

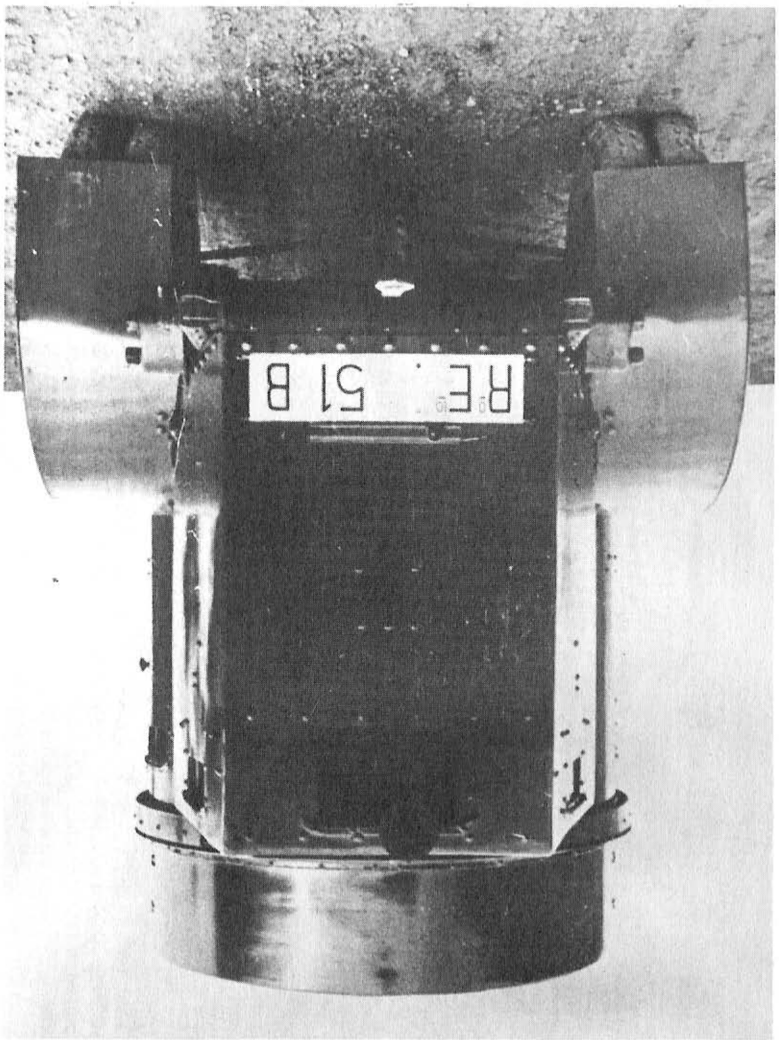
Main:	2 x 8 mm St. Etienne Mod 1907
Traverse:	300 degree turret. Operation: hard
Elevation:	plus 35 degrees, minus 15 degrees (some sources claim plus 26 degrees, minus 15 degrees).
Secondary armament:	1 x 8 mm St. Etienne Mod 1907 in rear. 4 x 8 mm Chauchat light machine guns (C.S.R.G.)

Stowage

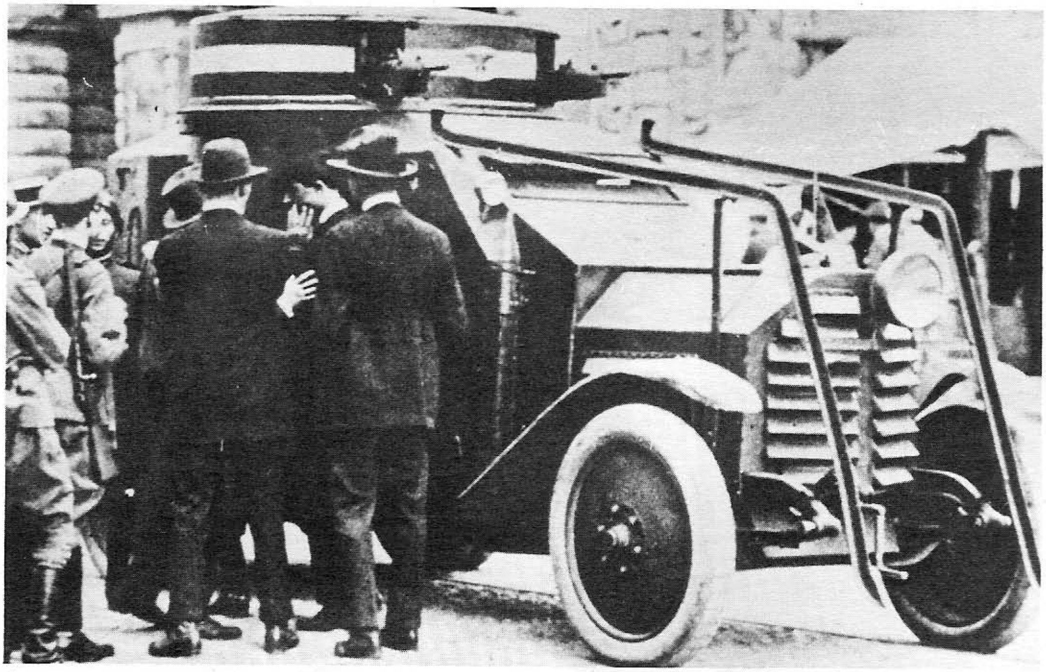
Ammunition:	8 mm St. Etienne: 15,600 rds. (some sources claim 18,000 rds)
Ammunition, 8mm Chauchat:	4,800
Internal Fuel Capacity:	22 Imp. gals. 100 Litres

Armour

Type:	Welded and bolted laminated steel
Hull	0.236" (6 mm)
Engine covers:	0.236" (6 mm)
Belly, front:	0.118" (6 mm)
Rear:	0.197" (5 mm)
Turret	0.236" (6 mm)



ABOVE: *The rear view of a Lancia armoured car showing the details of the rear machine gunners position.*



ABOVE: *An Ansaldo Abm of the Regia Guardia, on duty during a strike in Milan in August 1922. The emblem of the Regia Guardia can be seen in the centre of the turret between the two St. Etienne machine guns.*

also two small seats and the stowage box, so that four members of the crew could be seated. The driver was on the right.

The rotatating turret was placed on the roof of the armoured box. It was supported on a dual ball ring, the inferior being of supports and the lateral of guide. It was very large and with a hatch on the roof; it could be locked in travelling position by a a pawl stop; in combat, the turret could be rotated and fixed in the most suitable position by two screw clamps.

The armament consisted of three Saint Etienne machine gun arranged like this: two in the rotating turret, fitted on their standard pivoting brackets and protected by a double shield; the third one, kept in reserve, might however be used through the rear port of the car on a bronze bracket. It had also its own tripod for use on the ground, independently from the Abm.

Besides, there were four Chauchat LMGs, arranged in rifle-racks and which could be fired through the side ports of the turret hatch. Spools, magazines and spare part boxes were arranged in proper shelves. The crew of the car was also armed with bayonets.

The rear wheels were protected by an armoured mudguard with a side shield. Two wire-cutter drawn irons were carried on the front of the vehicle.

Marks an Hybrids

When a new model was decided upon, the first thing to be abolished was the bicycle suspended on the left wire-cutter. Then, the armament was changed and the Saint Etienne superseded by the standard 6.5 mm Fiat water-cooled machine guns. So in 1928, the armament of the newly renamed "Autoblindata Lancia, ad 1 (o2) torretta girevole" (One or two turreted Lancia armoured car) was of three Mod. 1914 machine guns (one with tripod). Each armoured car carried water reservoir internally, in addition to the three steam condensing assemblies of the weapons, which were fitted with case-bags. Each car had an ammunition stowage of 12,000 rds, in 240 magazines. There were also 4 6.5mm Mod. 91 carbines.

In 1935, some of the Abm's in Italian Somaliland received new low-pressured tyres and suitable wheels instead of the old high pressure ones. However, this modification did not give the expected results, and because the heavy weight and the hot climate tended to burst frequently. The same year, 1935 their cars had their water cooled machine guns replaced with the Air Force model of the same weapon, the Fiat 1914 Tipo Aviazione which was air cooled. The crew received also a number of hand grenades.

The new wheels were fitted to all IZM armoured cars in Somalia; but only four of them mounted the air cooled machine guns. The last surviving model, whose hull is still exhibited in the Trieste War Museum, had sand type tyres and only single wheels at the rear. The armour of the rear mudguard was enlarged; the front mudguards are missing. This car is said to have been in German service during the Second World War.

Tactical employment

The new squadrons equipped with these cars were fitted engaged in the second Plave Battle (June 1918 – "Solstice" Battle) and subsequantly in the Vittorio Veneto offensive of the following October.

The Squadriglie were formed, as the early ones, in Genova (Deposito 1° Reggimento Artiglieria da Fortezza); the last one carried the Number 17.

Each had:

Seven armoured **cars** (3 sections of 2 cars + 1 in reserve);
One **motor car** for the commander of the Squadriglia;
Five **trucks** (one for the command, one for each section, one workshop);
One **motor-bicycle**; four **bicycles.**

All the trucks were Lancia 1Z for standardization purposes. A Captain commanded the Squadriglia; there were also 7 subaltern offices. There were 72 enlisted men. 35 of them serving in the Abm's; the remainder were in reserve or for auxiliary tasks.

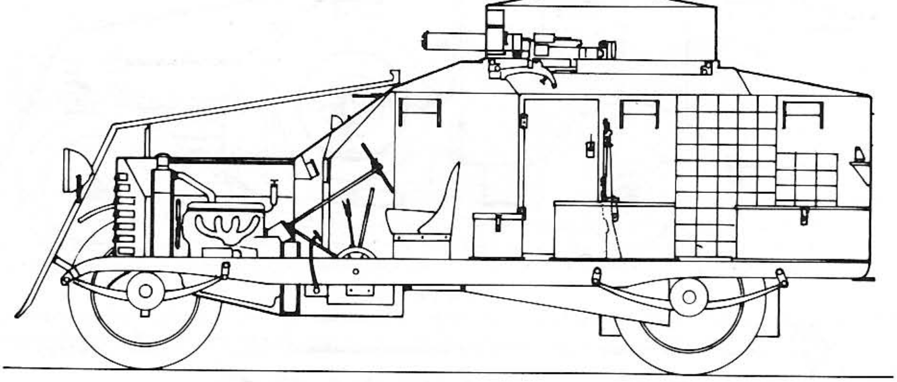
After the Armistice of November 1918, the Lancia Abm of both models performed security tasks on the Yugoslavian border. In September 1919 22 of them passed to Fiume with the famous Poet D'Annunzio. Some others were sent to Libya with the Assault Army Corps.

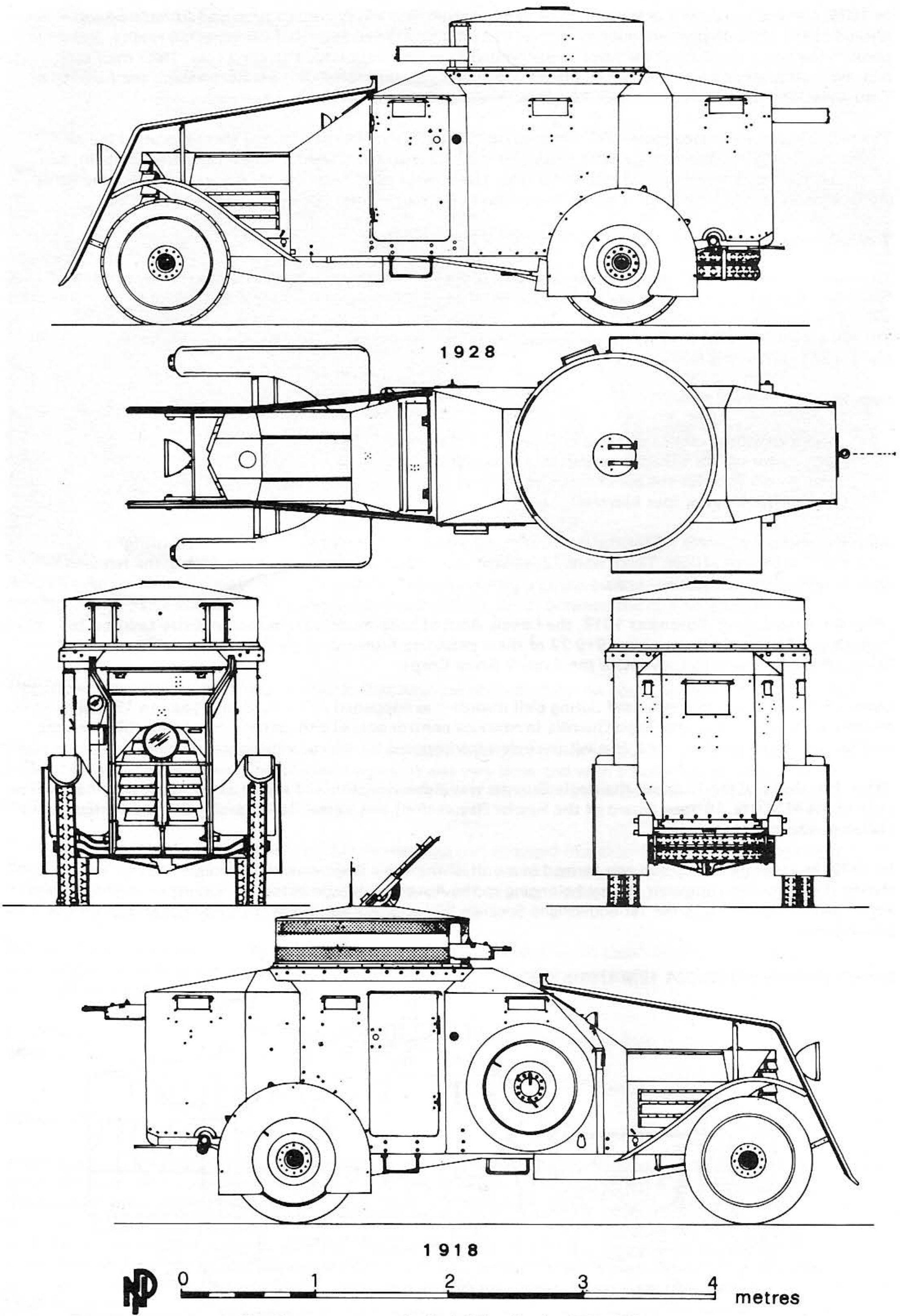
Since 1917, Lancia Abms were used during civil disorders as happened in Turin in that year. In 1919 a number were supplied to the Regia Guardia (a new riot control police) and carried their badge, between the two Saint Etienne machine guns, in a white circle superimposed on the red-white-green stripes.

After the advent of the Fascism, the Regia Guardia was disbanded, some of their Lancia Abms were handed over to the M.V.S.N. (Armed Guard of the Fascist Revolution) and to the Reali Carabinieri (the famous Italian gendarmerie).

In 1929, an armoured car group was formed as a unit of the Tank Regiment, in Codroipo (Udine). Later, during the Ethiopian campaign 16 cars belonging to the Automotoblindo battalion, fought on the Northern Front and 21 belonging to the 1st Squadriglia Speciale "S" and to a section of the 2nd Squadriglia, on the South Front.

Section Drawing of LANCIA 1ZM 1/48th Scale





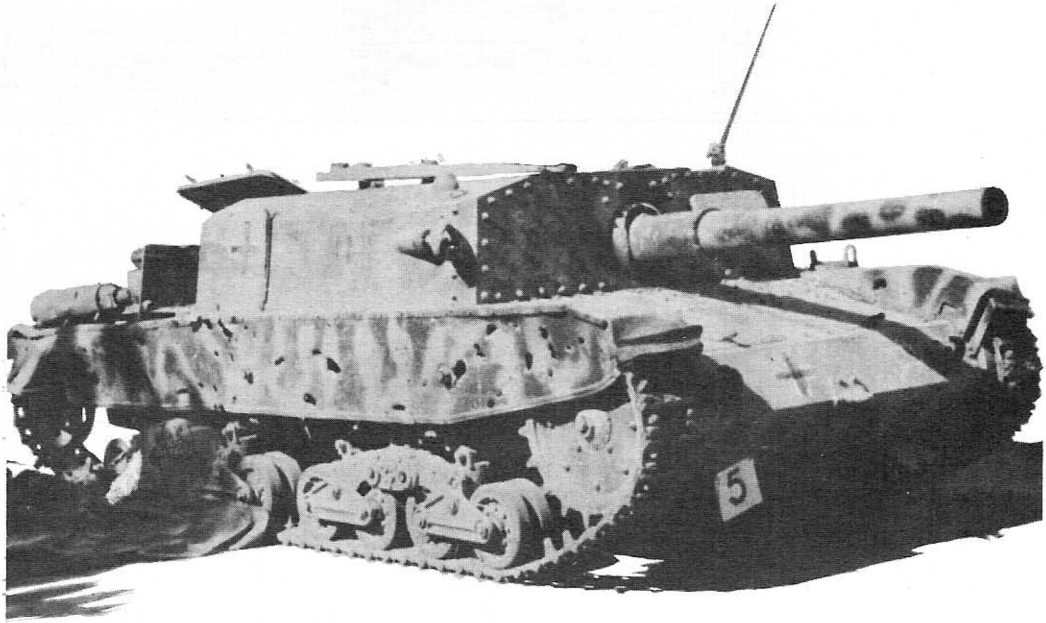
Abm. ANSALDO

A 1ZM unit was also sent, in January 1937, to Spain with the C.T.V. (Italian Volunter Force) and some cars were also shipped to Tien Tsin (China) in the same year.

As late as 1941, still working IZM starred in the film "Giarabub" directed by Alessandrini. Today, only the one badly damaged 1ZM survives at the Trieste War Museum.

The tactical unit remained the "Squadriglia" (Squadron) of 6 cars; however, actions could be carried out by section of 2. Their use stationary by night in forward areas was not recommended, while wading could not be negotiated without precautions. Generally, in the Thirties, each **Squadriglia** had **two Sezioni,** each with one 1Z (two-turret) and 4 1ZM. The 1Z was used as a command car.

The Lancia Abms were among the best vehicles of all fighting powers in World War 1, even if vulnerable in the tyres and the springs. These features caused the armoured car to be undervalued except for colonial use. In fact, until 1940, the Italian Army did not adopt any vehicle of this kind. At least two 1ZM were supplied to Albania. They were found in Tirana when the Italians occupied the town in April 1939. Four cars of the same one-turret model were handed over to Austria in March 1934. Renamed "Ansaldo Strassenpanzer", they laid the foundation of the Austrian armoured forces.



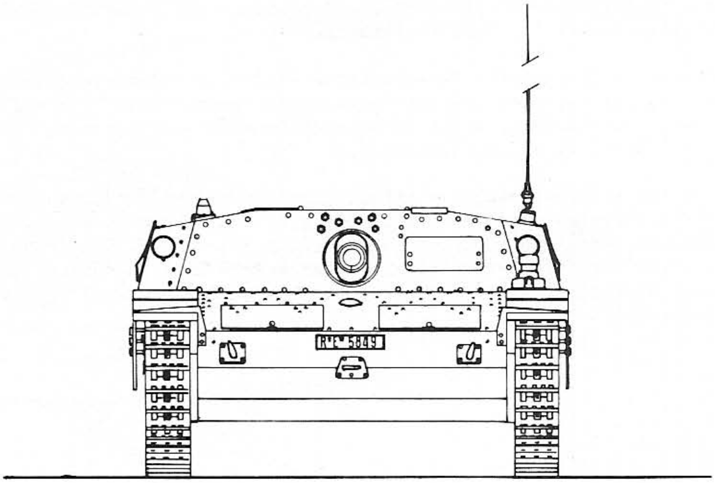
ABOVE: *A Semovente Da 105/25 su Scafo M43 damaged in action with, and captured from, the German forces in Italy in 1944. The German designation for these assault guns was "Strumgeschuetz M 43 mit 105/25(853)(i)".*

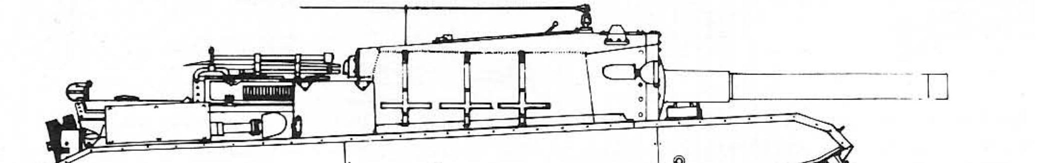
SEMOVENTE DA 105/25 SU SCAFO M 43 – 1943/44

Drawings and historical research by Dott. Nicola Pignato.

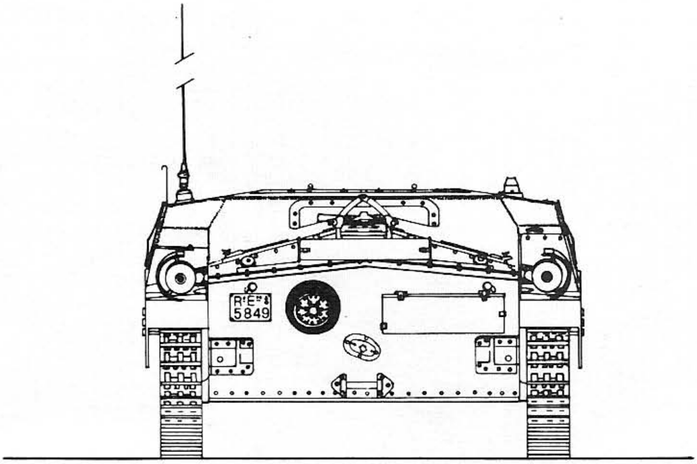
In April 1942 a study was carried out on the possibilities of mounting a 105 mm gun howitzer on the chassis of the new P 40 heavy tank which was just about to enter production. As an alternative the possibility of realising a lighter Semovente armed with a similar gun was also considered due to the delays in producing the P 40 tank itself.

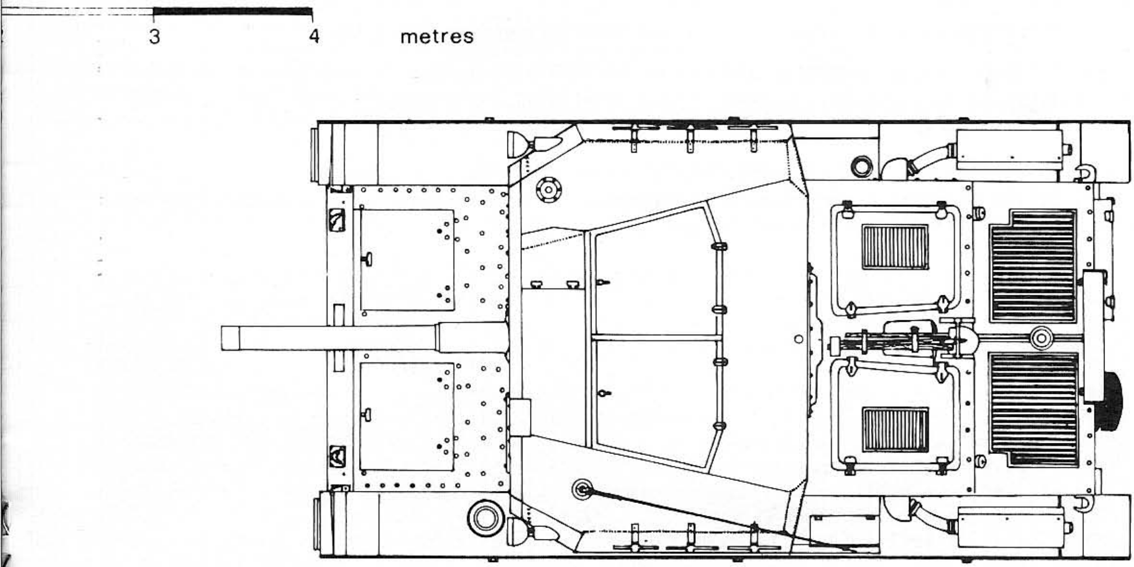
In fact, the alternative light Semovente was decided upon, as this second project could be more rapidly concluded and the new Semovente put into production quickly.



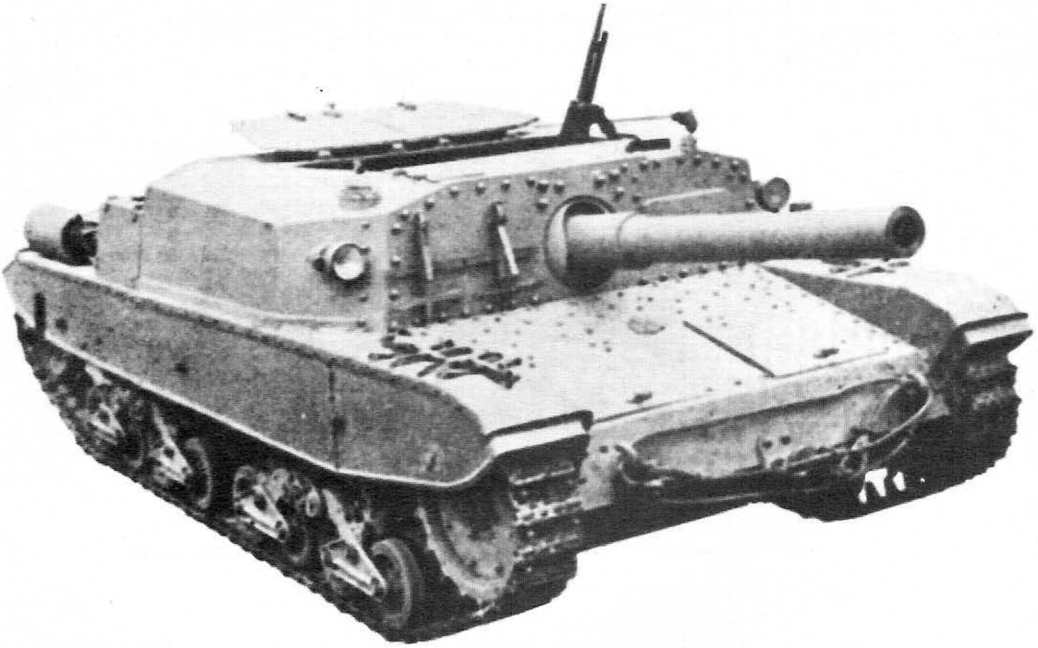


SEMOVENTE M





43 DA 105/25



ABOVE: *A front view of the Semovente Da 105/25 su Scafo M42 Allargato (widened M 42 hull) the prototype for the Semovente Da 105/25 series. This vehicle differed only in minor respects from the production models. Of interest is the method of mounting the 8mm Breda machine guns so that aircraft could be engaged without the gunner exposing too much of his body.*

The decision to design a light Semovente was based upon the following points;

(a) The gun mounting could be that designed for the Semovente based on the chassis of the P 40.

(b) Use of the mechanical parts of the existing M 42 medium tank would simplify manufacture and maintenance.

(c) A smaller size of vehicle would help conserve raw materials

(d) The lower weight, estimated at 25% less, would allow use of a petrol engine which was preferable due to the shortage of diesel fuel oil.

As soon as the project was approved, the Ansaldo Gun Factory in Genoa developed, in a very short time, a new 105 mm L/25 Howitzer which was suitable for mounting in the Semovente vehicles. This howitzer was based upon the standard 105 mm L/23 Field Howitzer of the Italian Army, which was already in production at the Ansaldo works. This construction was completed on the 16th January 1943.

Only twelve days later, on the 28th January 1943, the prototype of the new Semovente was ready. After preliminary trials and a number of test firings the vehicle was inspected by the Superior Inspector of the Armoured Forces, accompanied by the Inspector of Ordnance, on the 1st February 1943. Within twenty-four days an order was placed for the manufacture of 30 of these Semovente. The official designation was to be "Semovente Da 105/25 su Scafo M 43". Even before the first units were delivered a further order for 100 Semovente was placed on the 10th April 1943. In May this order was again increased to a total of 200 vehicles. In June an additional order for 66 units was placed and finally the total order was increased to 454 Semovente Da 105/25.

The first Semovente, which had been ordered on 25th February 1943, were delivered early in May to the Groups DCI – 601st and DCII – 602nd. Twelve Semovente to the former and five to the latter.

By the 30th June 1943, the Ansaldo Company had delivered all of the first 30 vehicles ordered. Only the requirements for three to four artillery groups had actually been accepted by the Regio Esercito before the Italian Armistice on the 8th September 1943. Many of these Semovente were taken over by the German Forces that occupied Italy. In addition to the existing units that fell into German hands the Ansaldo factory was ordered to maintain production and the entire output was to be delivered to the Wehrmacht. However, the production between the 9th September and the 31st December 1943 was only 24 vehicles. In 1944 manufacture continued so that 67 vehicles were built as the Semovente DA 105/25 in that year. The Germans gave their own designation to these Semovente, "Sturmgeschuetz M43 mit 105/25 (853) (i)."

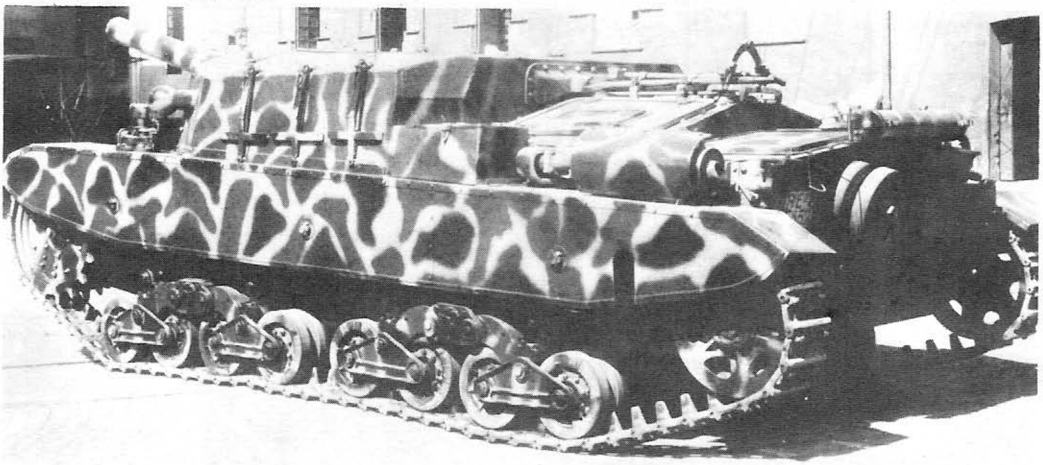
The Semovente Da 105/25 was intended to be utilized by the Artillery Groups of an Armoured Division for the close support of the heavy tank regiments, which were to be equipped with the P 40 tanks or even the P 43. The introduction of the new Semovente, in fact, gave the Artillery Groups an ability for even more powerful combined attacks, for support and for defence. This equipment also allowed a Semovente unit engage in a normal artillery counter – bombardment action. The Artillery Groups equipped with these Semovente in 1943 were formed with three batteries of Da 105/25 and three Carro Comando M 42 (See Bellona Prints Series 33). The first two Artillery Groups were completed before the Armistice and were reviewed by the General Ordnance Inspector at Colle della Cinfonara, south of Nettuno, Rome. These were the DCI which was the 235th Artillery Regiment of the "Ariete II" Armoured Division and DCII which was allotted to the "Centauro" Armoured Division which was formerly the "M" Armoured Division. Both Divisions were part of the same Corps.

Some of the Semovente of the "Ariete II" Armoured Division took part in the defence of Rome against German forces some days after the Armistice. Only one Semovente Da 105/25 served with an Italian unit after the German occupation. This one vehicle was issued to the headquarters squadron of the Cavalry Armoured Group "Leoncello" of the Army of the R.S.I. from February to April 1945. Few records are left which give details of these vehicles mainly because they did not serve for very long in the Italian Army. However, the Semovente Da 105/25 was well liked by the Italian troops who used it and gave it the nick-name "Bassotto" (dachshund). The Semovente Da 105/25 was in fact, the best Italian AFV design of World War II.

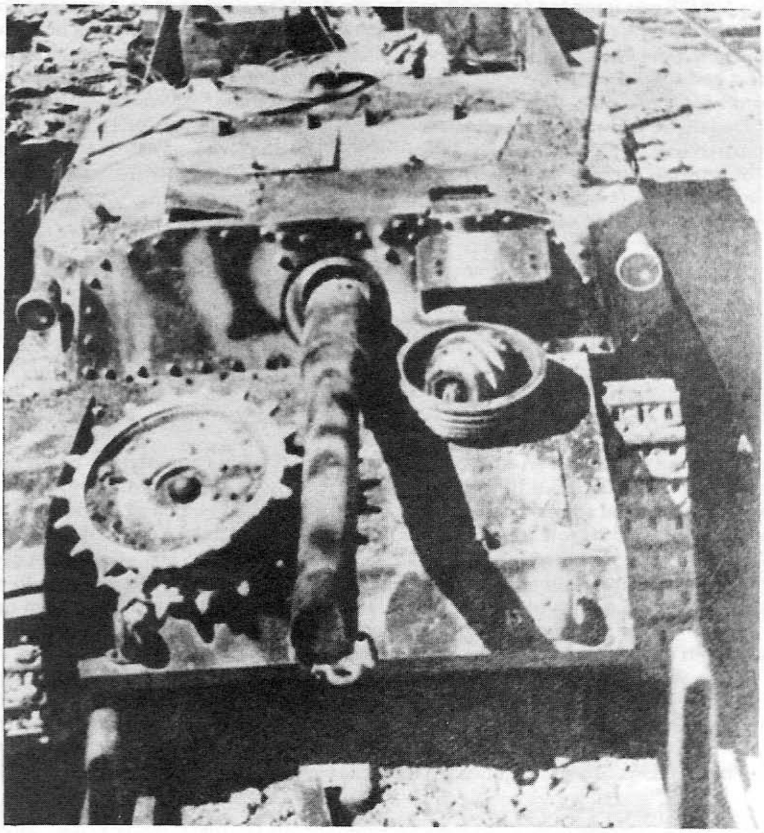
In 1944 a shortage of assault guns with an anti-tank capability led to a German order for a new model based upon the "Sturmgeschuetz M 43 mit 105/25 (853) (i)" which had originally been projected as "Semovente Da 76/46 su scafo M43". This Semovente was to be a tank destroyer armed with a modified version of the Italian standard 76/46, M34 Anti-aircraft gun. In its anti-aircraft role this gun could fire a 6.5 kg. shell at 715 meter/sec muzzle velocity so it was quite powerful. This 76/46 was modified for use in the Semovente by the addition of a muzzle counterweight and the use of the 105/25 mounting. Thus both guns could be inter changeable. Armed with this new 75 mm cannon the Semovente could only carry 43 rounds of main ammunition and 500 rounds for the usual 8mm Breda, pedestal mounted, machine gun. In addition to the armament changes the Germans also called for better protection in keeping with trends for fighting vehicles built during the same period of 1944. The heavier armour was achieved by attaching additional armoured plates spaced away from the main fighting compartment armour. Thus a sloped plate was put in front of the main front vertical plate. At the sides a large single sheet of armour was added outside the tracks thus forming spaced armour for the upper superstructure and a form of schurzen (apron) for the thin vertical side of the hull/fighting compartment. The official German designation for these Semovente was "Sturmgeschuetz M 43 mit 75/46 (852) (i)". A very limited number were manufactured, only ten units during 1944, and a further three in 1945.

One further version of this Semovente was also manufactured for the Germans, namely, the "Sturmgeschuetz M 43 mit 75/34(851)(i)". In this case the less powerful armament of the earlier Semovente Da 75/34 su Scafo M 42 was used because of availability. The muzzle velocity of this cannon being 610 metre/sec compared to the 715

BELOW: *The rear view of a new Semovente Da 105/25 at the factory. The racks at the sides are for carrying additional fuel cans.*

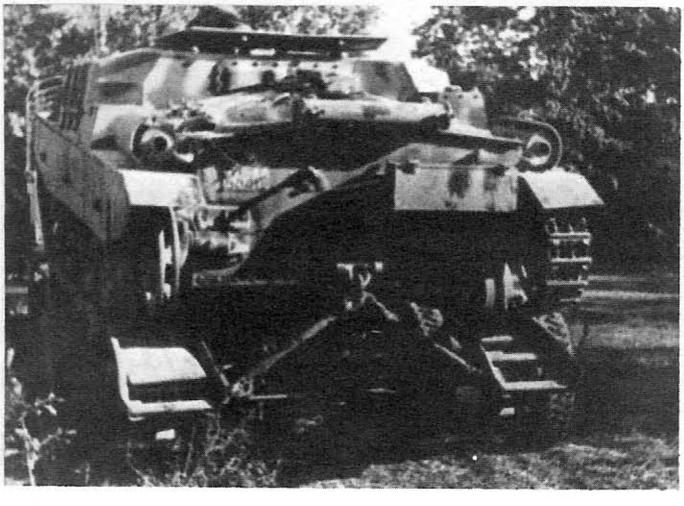


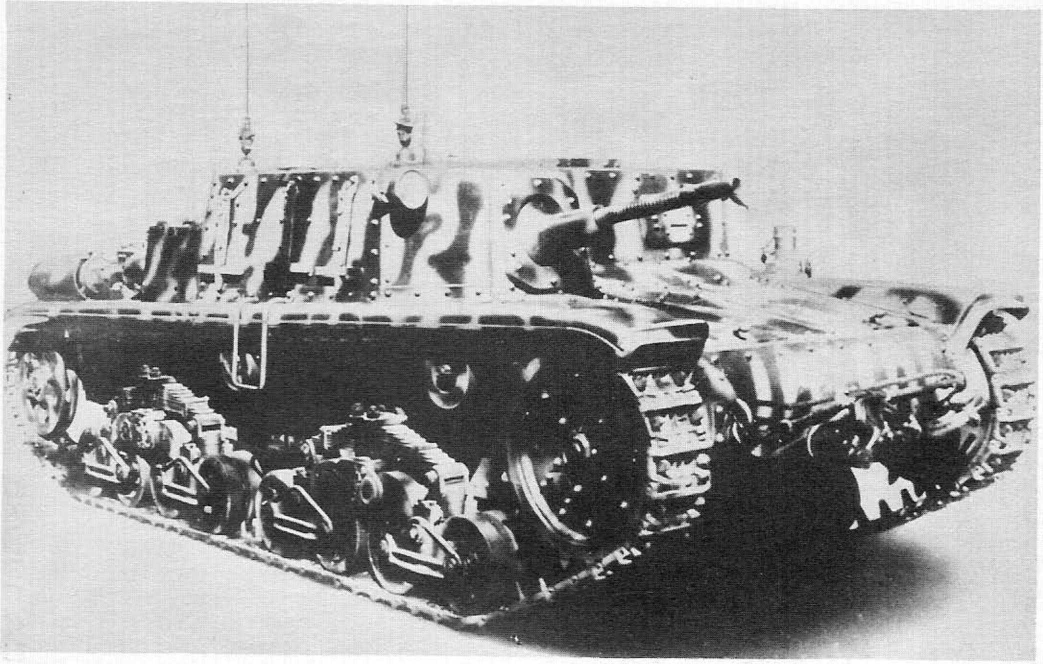
metre/sec of the 75/46. It appears that only some of these vehicles had the additional spaced armour that was standard on all the 75/46's. Pictorial evidence shows an interesting modification to these vehicles, the mounting of triple 8 mm Breda machine guns as an anti-aircraft weapon. Again only a small number were delivered, eight in 1944 and a further three in 1945.



ABOVE: *A Semovente Da 105/25 which never reached the front. This overhead front view shows a vehicle which was badly damaged during an air attack on a rail siding.*

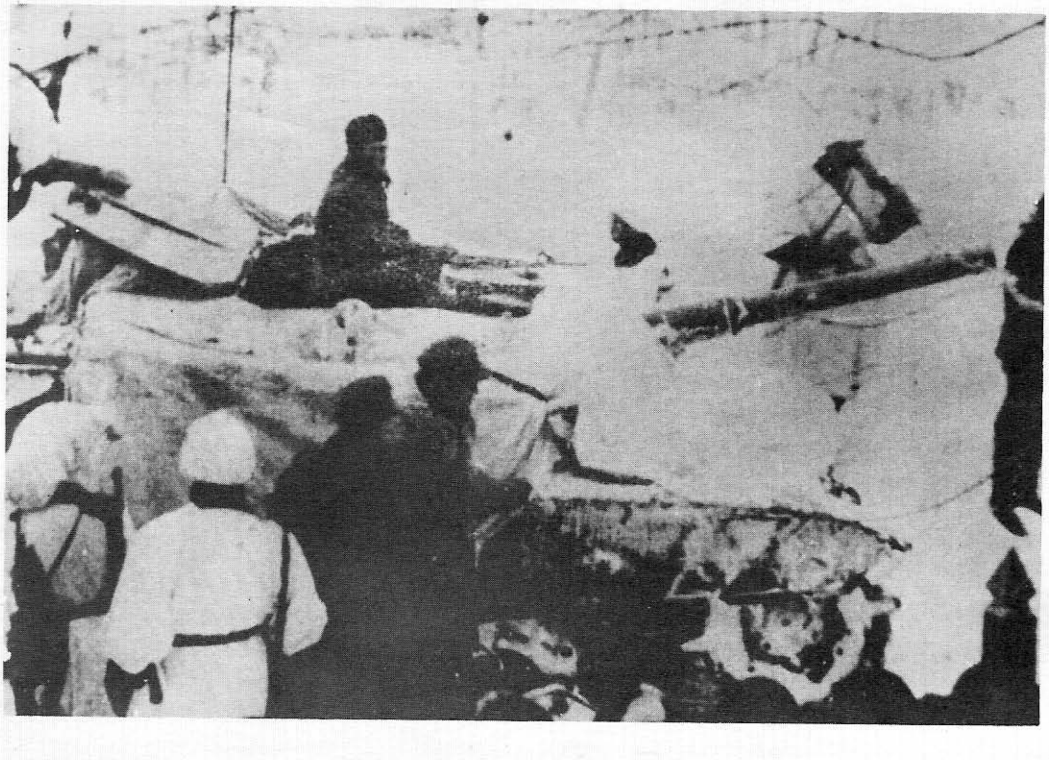
BELOW: *Rear view of a Semovente 105/25, which has lost its left track, on board a recovery trailer.*

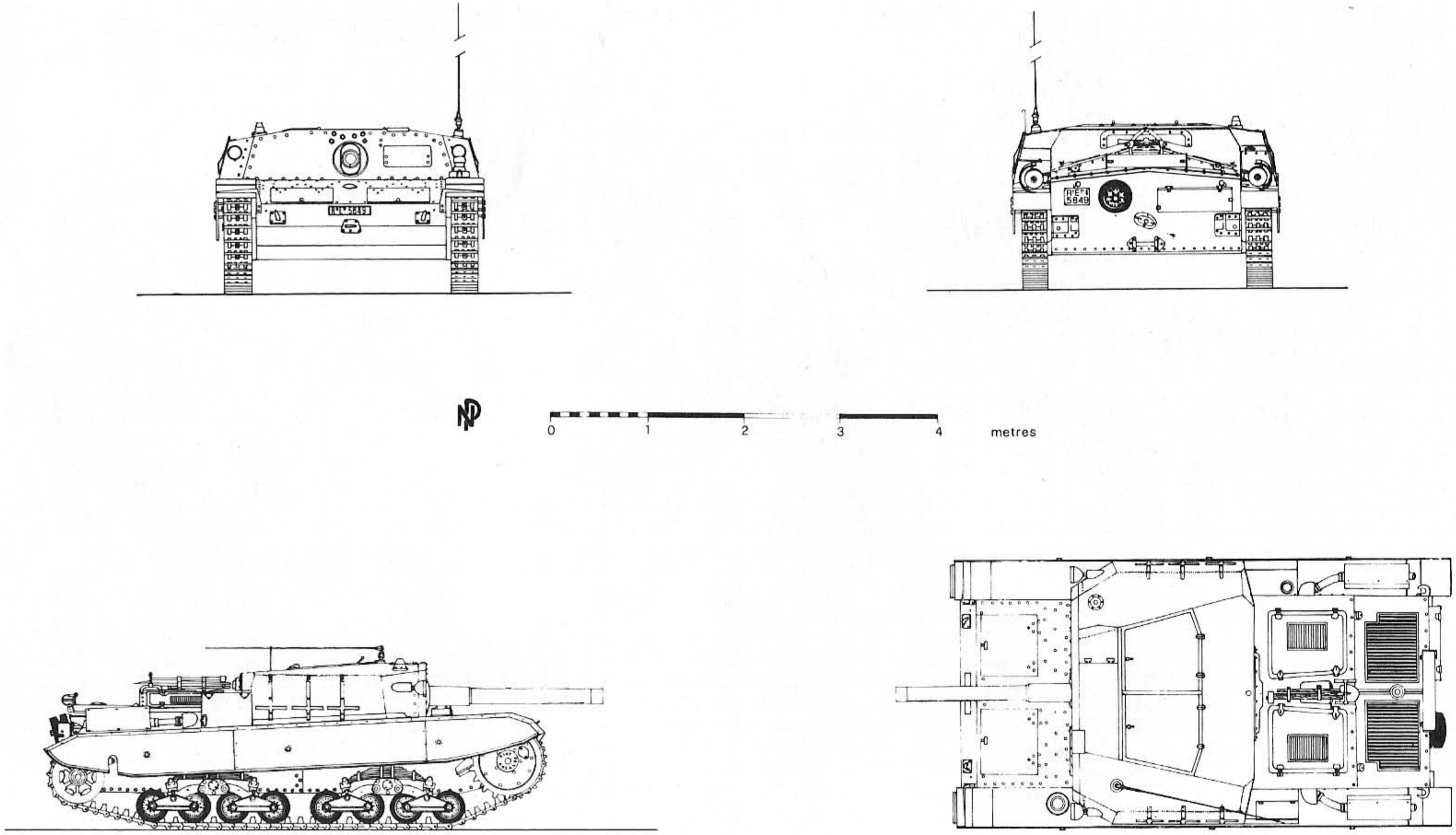




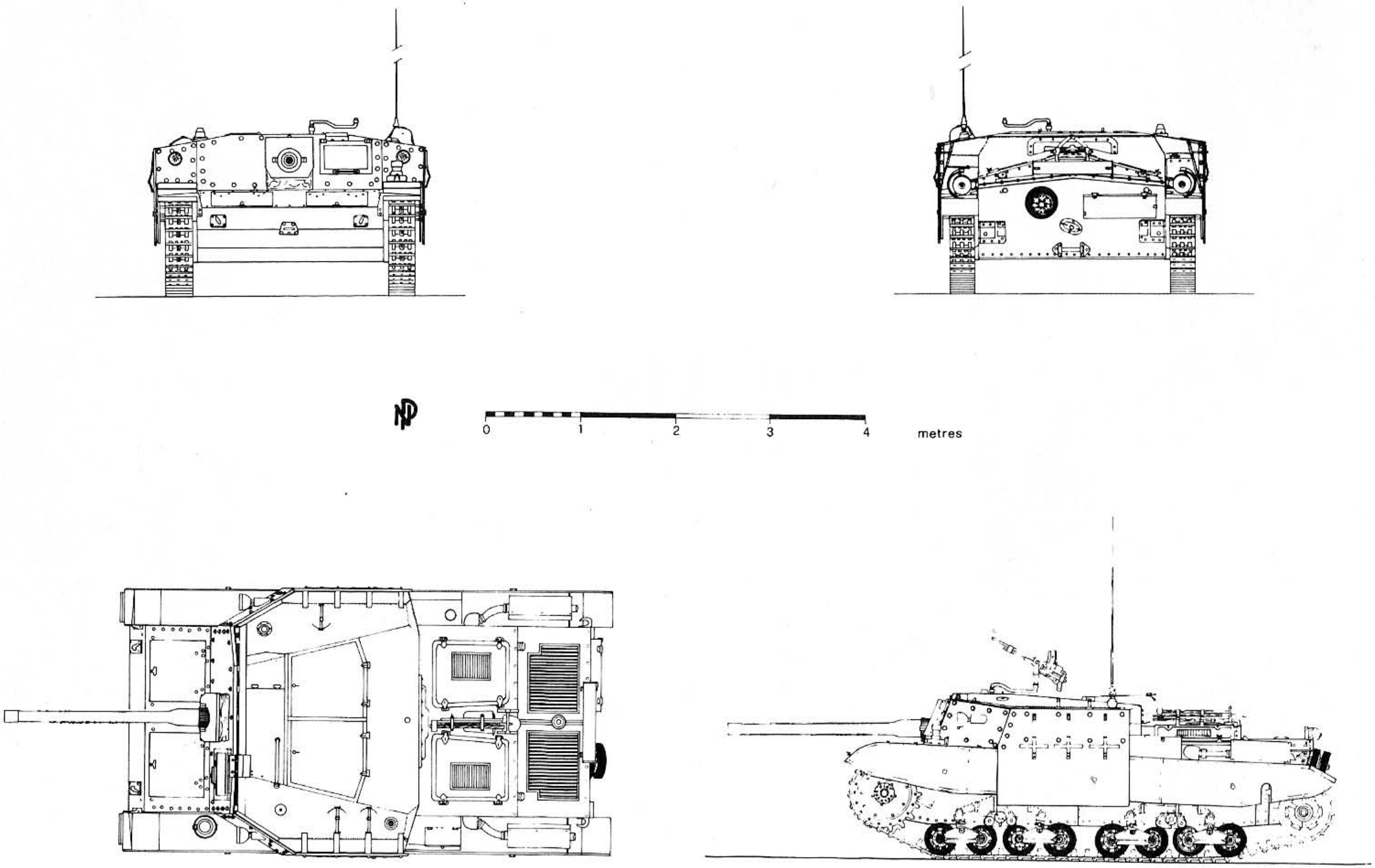
ABOVE: *Front view of a Carro Comando M 42 for the Semovente M 43 units. Note the same camouflage patterns. Details particular to the Carro Comando vehicles are provided in Bellona Prints series 33.*

BELOW: *A "Sturmgeschuetz M 43 mit 75/34(851)(i)" Only eleven of these vehicles were delivered so this photograph is indeed rare. Unfortunately the quality and the snow camouflage make it difficult to ascertain any details.*

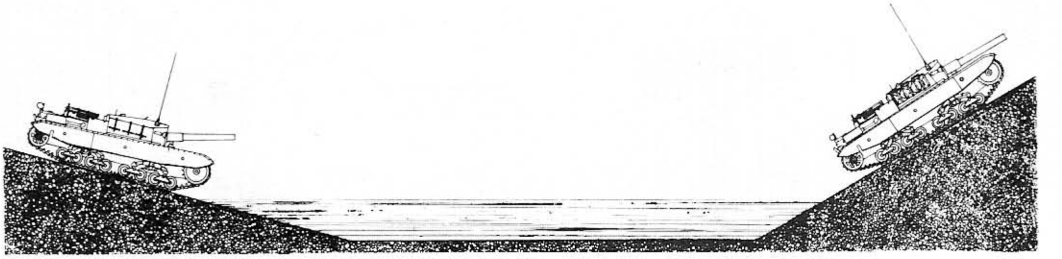




SEMOVENTE M43 DA 105/25



STURMGESCHÜTZ M43 mit 75/46 (852) (i)



Technical Specification for Semovente Da 105/25 SU Scafo M43

Crew:	3 – Commander, Gun layer Loader, Radio operator Driver
Weight, combat loaded:	35,750 lbs 15.25 Long tons, 17.87 Short tons 15.7 Tonnes

Performance

Speed, Max. Road:	24.5 m.p.h. (38.4 Km.p.h.)
Max. Gradient:	40 degrees (89%)
Fording depth:	3' 3½" (100 cm)
Trench crossing:	6' 10½" (210 cm)
Step:	2' 7½" (80 cm)
Ground pressure:	13.9 lbs/sq. ins (0.98 Kg/sq.cm)
Range (internal fuel) Road:	93 miles (150 km)
cross country	10 hours
Power to weight ratio	10.8 metric HP/tons

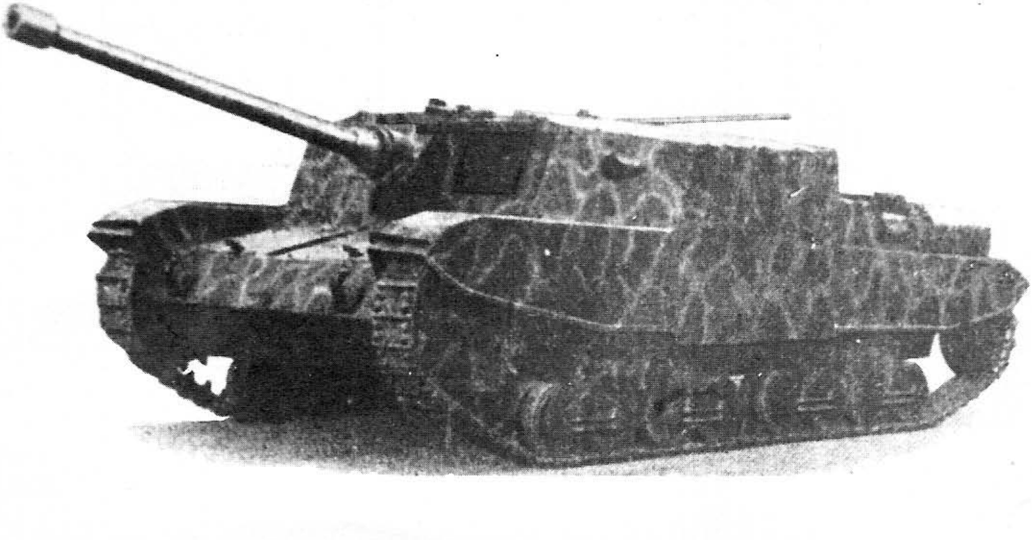
Dimensions

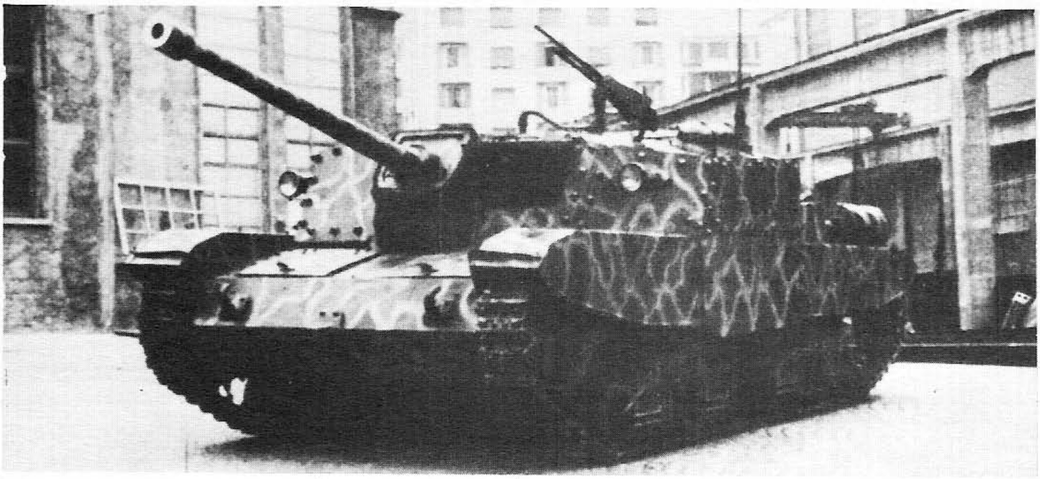
Length overall:	19'0½" (580 cm)
Length:	16' 10½" (517 cm)
Width:	9' 3" (282 cm)
Height:	5' 8½" (174 cm)
Ground clearance:	1' 1¾" (35 cm)
Fire height of gun:	4' 6¾" (139 cm)

Trackwork

Centres:	7'8" (234 cm)
Length on ground:	10'1" (307 cm)
Width	10¼" (26 cm)
Number of links per track:	86

BELOW: *The prototype of the "Sturmgeschuetz M 43 mit 75/46(852)(i)" series. The production vehicles were fitted with an additional armour shield on the gun barrel close to the frontal plate.*





ABOVE: *A later picture of the prototype of the "Strumgeschuetz M 43 mit 75/46(852)(i)" series. Already the armoured shield is fitted to the base of the gun barrel. Also of interest is the machine gun mounting and stowage of the crew's helmets.*

Mechnical Details

Engine:	1 x 15 TB, 11.98 litre V–8 water cooled petrol engine developing 170 bhp at 2400 rpm.
Transmission:	5 forward, 1 reverse
Steering:	Conic gear combination, two epicyclic groups.
Suspension:	Two semi-elliptic leaf spring units each acting as two double wheel bogies.

Armament

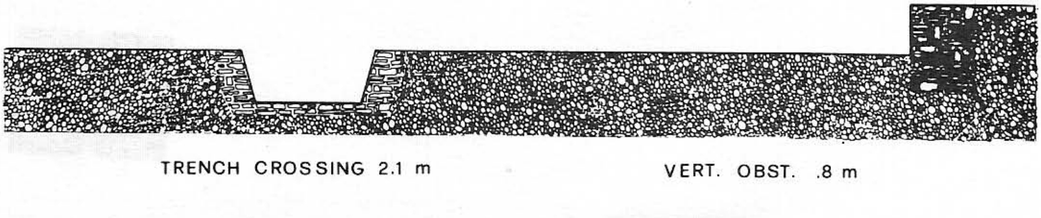
Main:	1 x 1500/25 Ansaldo gun howitzer
Calibre, and length in Calibres	105 mm (4.134 ins), L/25
Traverse:	19 degree left, 19 19 degree right Operation: hand plus 22 degrees, minus 12 degrees
Elevation:	Plus 22 degrees, minus 12 degrees
Range:	800 metres
Secondary armament:	1 x 8mm Breda 38 machine gun, for pedestal mount or use in separate field mounting

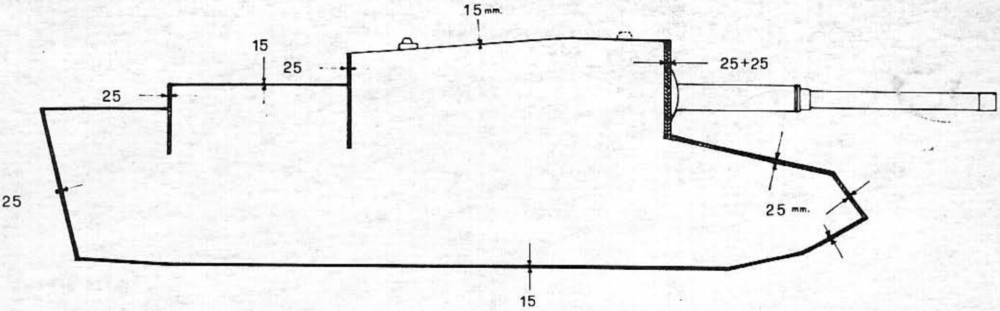
Stowage

Ammunition main armament:	48 rds.
Ammunition, secondary armament:	864 rds.
Internal Fuel capacity:	79.5 Imp. gals. 360 litres

Armour

Type:	Rolled plates of homogeneous Machineable quality bolted and welded





Hull	Nose upper: 1.969 " (50 mm) at 35 degrees Nose lower: 0.984" (25 mm) at 30 degrees Glasis plate: 0.984" (25 mm) at 12.5 degrees
Sides:	0.984" (25 mm) At 90 degrees
Engine covers:	0.590" (15 mm) at 15+5 degrees
Belly front:	0.590 " (15 mm) at 0†12.5 degrees
Belly rear	0.590 " (51 mm) at 3.5 degrees

Superstructure

Front:	2963 " (75 mm) at 90 degrees
Side:	0.984 " (25 mm) at 75 degrees
Rear:	0984 " (25 mm) at 90 degrees
Roof:	0.590 " (15 mm) at 0+4 degrees

COMMUNICATION

1 x 'Magneti Marelli" RFI CA radio set.
* estimated.

Technical Specification variation for Sturmgeschuetz M43 mit 75/46 (852) (i)

Dimensions

Length overall;	23' 10" (728 cm)
Width;	9'5½" (288 cm)

Armament

Main: 1 x 75/46	
Calibre, and length in calibres:	75 mm (2.953 ins), L/46

Armour

Front:	1.181" (30 mm) * at 70 degrees and 2.953" (75mm) at 90 degrees
Sides:	0.590 (15 mm) * at 90 degrees and 0.984 (25 mm) at 75 degrees

* estimated.

Technical specification variation for Sturmgeschuetz M43 mit 75/34 (851) (i)

Dimensions

Length overall:	22' 1½" (674 cm)

Armament

Main:	1 x 75/34
Calibre, and length in	75 mm (2.953 ins) L/34

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